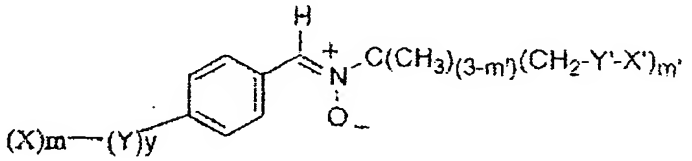
CLAIMS

1. A compound, characterized in that it corresponds to the formula (I):



(I)

in which:

X represents a hydrophilic group which is selected from a monosaccharide or a polysaccharide as well as amino derivatives of monosaccharides and polysaccharides, a poly(ethylene oxide) chain, a peptide chain, a polar ionic group selected from a quaternary ammonium, an amine oxide, or a carnitine group;

m represents an integer equal to 1, 2 or 3;

Y represents a spacer arm which is intended to link the aromatic nucleus to the hydrophilic X substituents;

Y is selected from ester, amide, urea, urethane, ether, thioether and amine functions, and C_1-C_6 hydrocarbon chains which are optionally interrupted by one or more ester, amide, urea or urethane functions and by one or more ether, amine or thioether bridges;

y represents an integer equal to 0 or to 1;

Y' represents a group selected from an ester function, an amide function, a urea function, a urethane function, an ether bridge or a thioether bridge;

m' is an integer selected from 1 and 2;

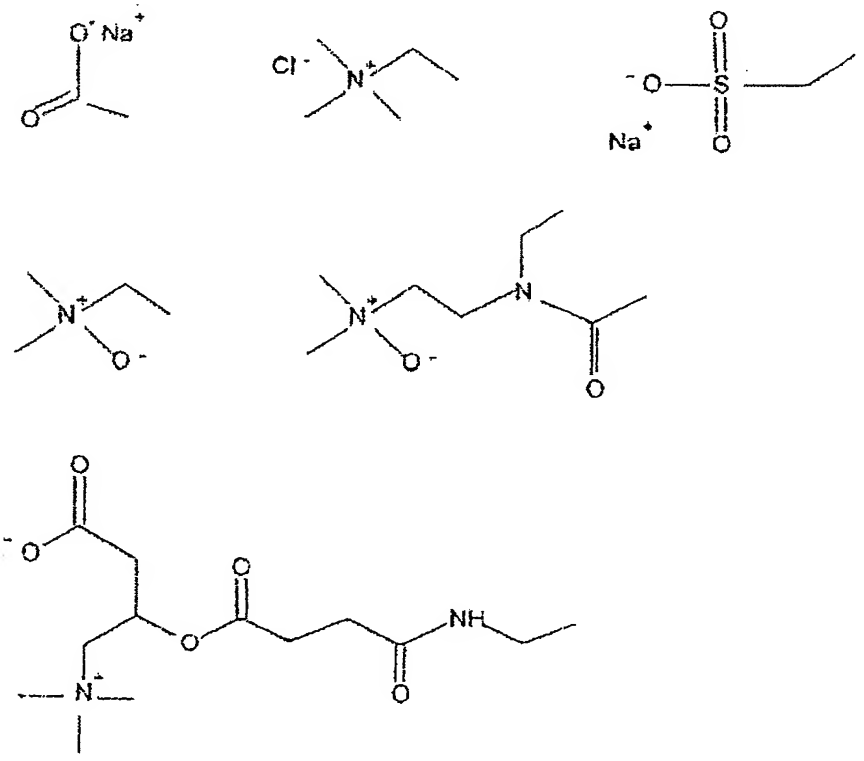
X' represents a hydrogen atom or a C_4-C_{14} alkyl chain which is optionally substituted by one or more fluorine atoms.

2. The compound as claimed in claim 1, characterized in that X represents a group selected

from: glucose, lactose, fructose, mannose, galactose, ribose, maltose, glucosamine, sucrose and lactobionamide.

3. A compound as claimed in claim 1, characterized in that X represents a group selected from poly(ethylene oxide) chains comprising from 30 to 100 ethylene oxide units, preferably from 50 to 60 units.

4. A compound as claimed in claim 1, characterized in that X represents a group selected from



5. A compound as claimed in claim 1, characterized in that at least one of the following conditions is satisfied:

X represents a group selected from: lactobionamide, carnitine or a polyoxyethylene chain;

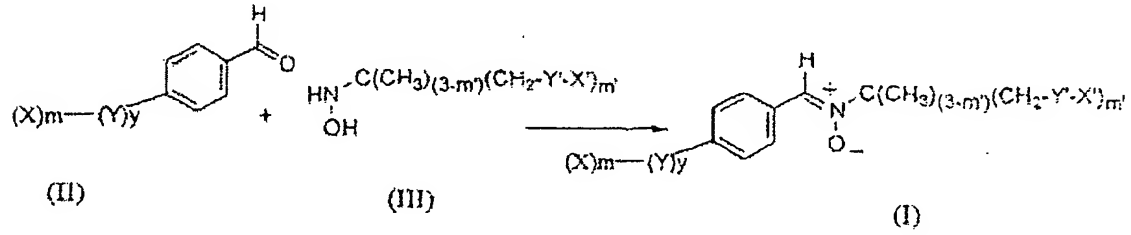
m represents 1;

m' represents 1 or 2;

X' is selected from the groups octyl, decyl, dodecyl and $CF_3(CF_2)_rCH_2CH_2-$, where $8 \geq r \geq 6$.

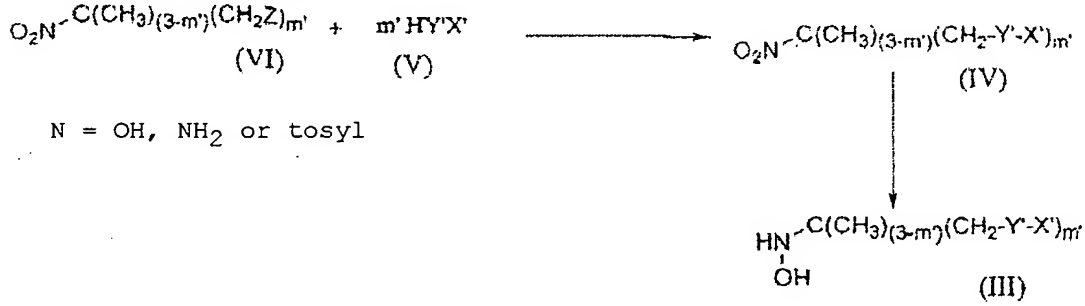
6. A process for preparing a compound

corresponding to the formula (I) as claimed in any one of claims 1 to 5, with this process being characterized in that an aldehyde corresponding to the formula (II) is reacted with a hydroxylamine corresponding to the formula (III) in accordance with scheme 2 below:



Scheme 2

7. The process as claimed in claim 6, characterized in that the compound of the formula (III) is prepared in accordance with a process which is described in scheme 3:



Scheme 3

8. A pharmaceutical composition comprising at least one compound corresponding to the formula (I) as claimed in any one of claims 1 to 5 in a pharmaceutically acceptable excipient.

9. The use of a compound corresponding to the formula (I) as claimed in any one of claims 1 to 5 for preparing a drug which is intended to prevent and/or treat the effects of free radicals.

10. The use of a compound as claimed in any one of claims 1 to 5 for preparing a drug which is intended to prevent or treat the pathological conditions linked to oxidative stress and to the formation of oxygen-containing free radical species.

11. The use as claimed in claim 10 for preventing or treating a pathological condition

selected from immune and inflammatory diseases, the ischemia-reperfusion syndrome, atherosclerosis, Alzheimer's disease, Parkinson's disease, lesions due to UV and ionizing radiations, Huntington's disease, cancers and cellular aging.

12. A cosmetic composition, characterized in that it comprises at least one compound corresponding to the formula (I) as claimed in any one of claims 1 to 5 in a cosmetically acceptable excipient.

13. A cosmetic treatment method for preventing and/or treating the effects of aging, characterized in that a composition as claimed in claim 12 is applied to the skin or to the epidermal appendages.

14. The use of a compound corresponding to formula (I) as claimed in any one of claims 1 to 5 in organic synthesis as a free radical capturing agent in free radical reactions.